THE GRYPHON

OWNERS MANUAL
THE GRYPHON ELEKTRA

INTRODUCTION

First of all, we would like to thank you for purchasing the Gryphon Elektra preamplifier created by Gryphon Audio Designs for Audio Reference use.

The Gryphon Elektra is a refined product of leading edge technology. This manual will enable you to fully utilize and appreciate its quality.

ELEKTRA

"Elektra, Opera in one act by Richard Strauss. First performed in Dresden, Germany 1909.
Elektra, daughter of Agamemnon, awaits the coming of her brother Orestes. When he returns he kills their mother and her lover, to revence the murder of his father".

UNPACKING

Keep the box and all the packing material in a dry place.

INSIDE THE BOX

You should find:

1 Elektra Preamplifier
1 Elektra power supply
2 AC cables
2 Power supply cables
1 pair of white gloves
1 acrylic polish
1 packing list
1 purchase registration card

If Orestes module is included:

2 power supply cables
1 pair of Lemo connectors

If Green bias is included:

1 Green bias control link

If anything is missing or if the box shows any sign of damage you must contact your Gryphon dealer or importer immediately.

INSTALLATION

We do not recommend that you place the preamplifier directly on top of the power supply. The length of the power supply cords allows you to place the power supply some distance away from the preamplifier. If you wish to place the power supply beside the preamplifier we suggest that you place it on the left side of the preamplifier where the risk of electrical interference is at a minimum.

AC POWER

The Elektra should ideally be connected to a separate AC group independent of other equipment.
The Elektra is designed for use with a three-pin AC connector with separate ground, but may in some countries be used with alternative grounding. *Your Gryphon dealer or importer will give you further details*

AC GROUNDING

In order to utilize the AC filtering section of the amplifier, connection to ground is essential. Generally, overall performance can be greatly improved with proper grounding. The degree of improvement will depend on local conditions.

AC POWER CORDS

Use only a dedicated AC power cord. Do NOT use loudspeaker cable or other wire not expressly designed to carry high current. Improper cable or cables of insufficient gauge will generate heat and the insulation may melt with disastrous results.
AC cords DO have an audible effect on sound quality, but experiments should be carried out with due consideration to safety.

AC CONDITIONERS ?

The Elektra has its own built-in AC conditioner, if you use external line conditioner or other devices, we strongly recommend that you listen to the Elektra without these devices before you make your decision.
Remember to listen for correct sound and not merely different sound.

AC POLARITY

Do not run long, thin, curled extension cords.
The Elektra is a true dual mono construction and we must strongly emphasize the importance of symmetrical AC power polarity for each channel. Asymmetrical AC polarity will strongly degrade soundstage recreation and other important aspects of the Elektra's performance.

FRONT PANEL FUNCTIONS

The dual mono concepts demand separate selector and volume controls.

SOURCE SELECTOR
The left knob on each section is the source selector and display confirms the source selected.
Clockwise:
Mute
OPT. (To select the optional Orestes phonostage)
CD
TUNER
TAPE
AUX

VOLUME CONTROL
The volume controls are located at the right side of each section. The separate displays shows positions from 0 to 23 to facilitate precise interchannel tracking.

REAR PANEL CONNECTIONS

GROUNDING POST

It is unlikely that you will need to use this unless the Orestes is installed. (Consult the Orestes section of the manual)

OUTPUTS 1/2/3

The Electra has 3 outputs for poweramplifiers to facilitate easy bi- or triamping.
Output 1 and 2 are RCA standard types. Output 3 is for direct connection to amplifiers with balanced inputs.
(Standard ref. AES 14-192 & ANSI S4.48 - 1992)

PIN 1 Ground
PIN 2 Positive
PIN 3 Negative

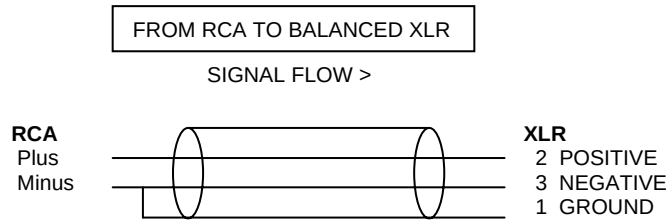
If you wish to connect more than 1 balanced power amplifier to your Elektra, your Gryphon dealer can make a dedicated cable that allows you to take advantage of a balanced power amplifier inputs ability to drive an interconnect cable in balanced mode from a single ended source.

Conversion from single ended to balanced:
The XLR type connector to the power amplifier input is terminated as above.

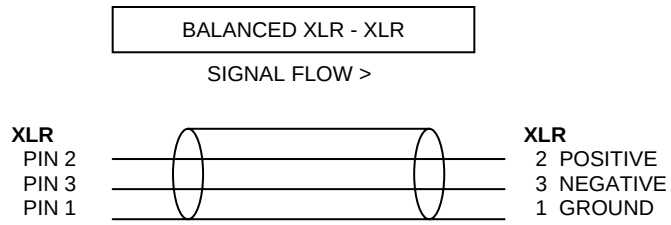
SINGLE ENDED TO BALANCED INTERCONNECT

The RCA type connector that connects to the preamplifiers out put is terminated as follows:
PIN 2 wire connects to POSITIVE (HOT)
PIN 1 (screen) & PIN 3 (COLD) wires are both connected to the screen of the RCA connector.

If you are using an amplifier that does not meet the AES or ANSI standards you must consult your Gryphon dealer before making your own cables.



BALANCED TO BALANCED INTERCONNECT



INPUTS

The rear panel has WBT RCA connections for the 4 input sources, tape output and 2 Power amplifier outputs.
Connect the external power supply to the DC power supply input.
The covered slot above the connections is for connecting turntable, power and impedance selection on the optional Orestes phono module.

DC POWER SUPPLY

Connect the external Elektra power supply to the DC power input with the supplied cables. Be careful to route the AC and DC power supply cables free of input interconnects. The DC power connectors are a Swiss made lock-type connector. Turn clockwise to lock firmly to avoid accidental disconnection.

GREEN BIAS (optional)

The unique Gryphon "Green bias" system will enable your Elektra to automatically program the Class A bias of your Gryphon Antileon power amplifier. (See the Antileon manual for further information). It is the actual position of the Elektra's volume control (not the playback level), that sets the Antileon bias.
The Elektra's Green bias circuit board can be set in 2 modes:

Position of volume control		Antileon Bias
LOW	HIGH	
0-2	0-4	50%
3-6	5-8	75%
7-23	9-23	100%

The Elektra is factory set at the high position.
If your speakers are very effective you may consider changing the setting to the low position. Your Gryphon dealer can do this for you.

ELEKTRA POWERSUPPLY

The Elektra Line version power supply is supplied with 2 DC outputs (left and right) and 1 set of cables.
The Power supply is prepared for optional power supplies for the optional Orestes phonostage.
Each channel has its own on/off switch on the rear of the power supply. For optimum performance at all times, we suggest that you leave your Elektra permanently on.
If you decide to turn your Elektra on and off, please remember to turn the power amplifier off before the preamplifier is turned off - and turn the preamplifier on before the power amplifier is turned on.

BURN-IN & WARM-UP

Your Gryphon Elektra has been thoroughly tested and burned in before shipping. Performance will, however, continue to improve during the first 100 hours of normal use. After this time, the Elektra will reach optimum performance 45 minutes after being switched on.

MAINTENANCE

We take great pride in the finish of every Gryphon product and our meticulous inspection procedures ensure that every product that reaches the customer lives up to the highest standards humanly possible. Gryphon products are not made by robots on automated assembly lines. They are handcrafted and built by real people who care.

ALUMINUM

Aluminum surfaces may be cleaned with a damp cloth. Some products made for restoration of vinyl interiors in cars may prove to be very useful. Make test on non visible surfaces before proceeding with any fluids.

ENAMEL

The Hydro Graphics Enamel covers are very sturdy and should be handled like laquered furniture.

ACRYLIC

Acrylic surfaces should only be wiped with a very soft, dry cloth. Small scratches may be removed with a damp cloth. Do not use spirits or paper tissue.

AC FUSES

The Elektra power supply has a AC fuseholder for each channel.
100-120V countries: 630 mAT 5x20mm SlowBlow
200-240V countries: 315mAT 5x20mm SlowBlow

Do not replace with any other fuse value.

ELEKTRA TECHNICAL SPECIFICATIONS

Frequency response: (+/- 1 dB)
DC - 3MHz

Phase Linearity: (10 - 120 kHz)
< 0.5 degree

THD
< 0.01%

Gain:
21.4 dB

S/N ratio:
100 dBA (A weighted)

Channel separation:
100 dBA (A weighted)

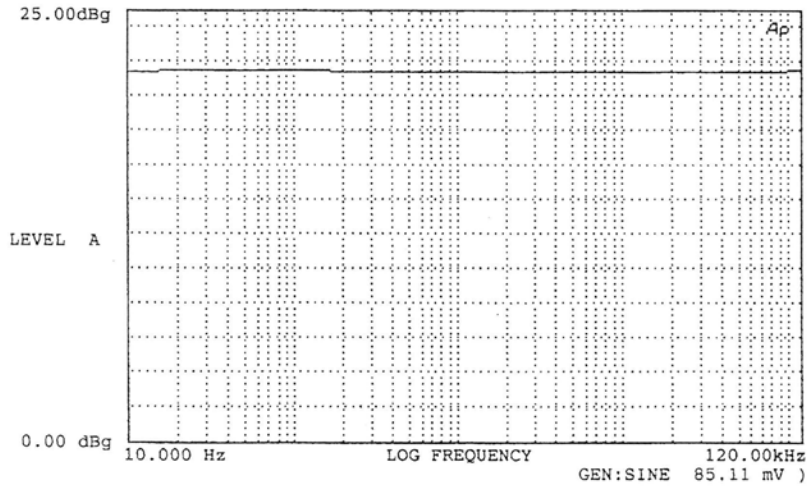
Input impedance:
10 kOhm

Output impedance:
22 Ohm

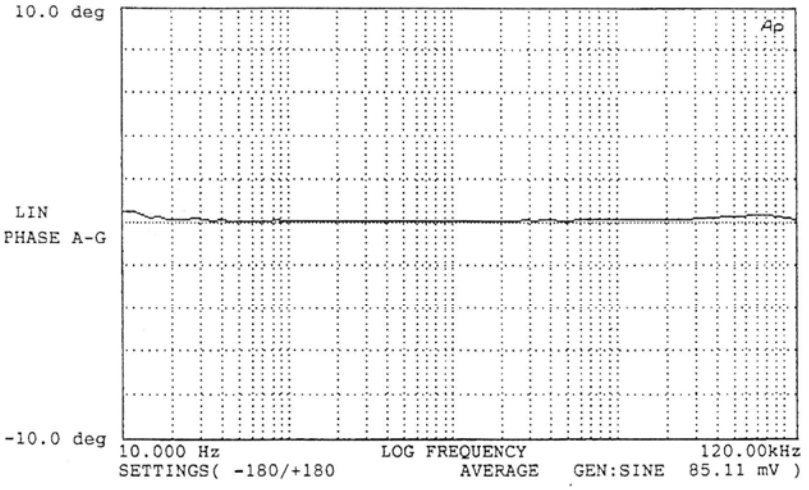
Sensitivity, Line inputs:
85 mV

Voltage sving:
+/- 15 V

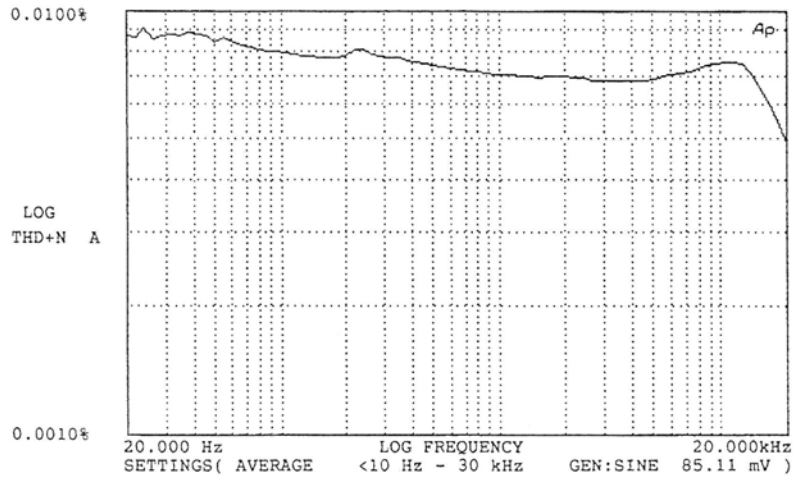
Shipping weight:
30 kg



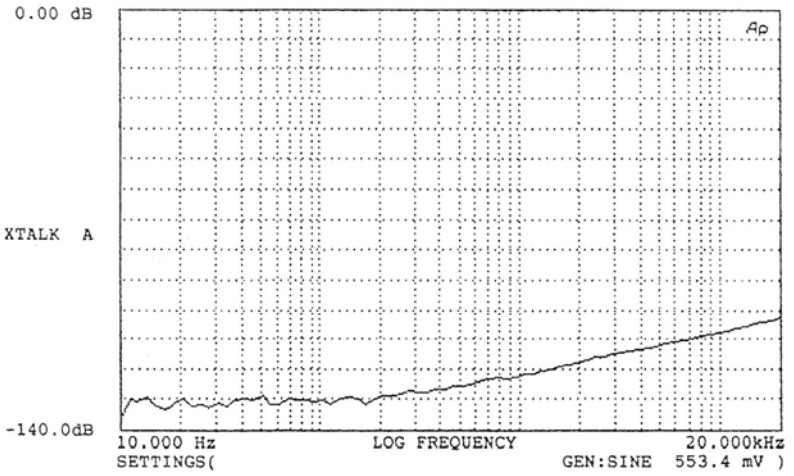
Frequency response 10 Hz - 120 kHz
Ref. output 1v rms.
Y axis indicates dB gain.
Gain is 21.4 dB +/- 0.1 dB



Phase linearity 10 Hz - 120 kHz
Faseshift is less than 0.5 deg.



THD (Total Harmonic Distortion)
Ref. output 1 V rms.



Channel separation: Better than 100 dB
(A Weighted)

OWNERS MANUAL
THE GRYPHON ORESTES MODULE
FOR THE GRYPHON ELEKTRA

CONGRATULATIONS

The Gryphon team would like to take this opportunity to congratulate and thank you for purchasing the Gryphon Elektra MC version preamplifier. To ensure optimum performance and maximum satisfaction, please read the owner's manual before proceeding to listen to your latest acquisition. As designers, audiophiles and music enthusiasts, we are well aware that most manuals a re read in the first heated moments of actually listening to the equipment, but we do advise you to read this manual carefully before using the Gryphon Elektra MC version

INTRODUCTION

Orestes was Elektra's brother in the Opera by Richard Strauss.

The Orestes is the most ambitious High End phono stage ever developed.
Despite the "digital age", we felt that we were far from finished with the LP and that there was still hidden information to be extracted from the vinyl.
The Orestes was made to prove this.
To reach this stage of analytical quality we employed very sophisticated technology. The Orestes is fully balanced from input to output. This is achieved without the use of op-amps or IC's.
Since all cartridges are "born" balanced, it makes sense to design a balanced phonostage and we were why it had never really been done. After the development of the Orestes, it was clear that such a project requires an exceptional level of expertise so high that only the most obsessed designers would even consider a project of that nature.
It took us a long time but we feel confident that you will appreciate the result.
The whole design philosophy is based on the benefits of exploiting the balanced natury of the cartridge, so in order to use the Orestes it is mandatory to use balanced connections only. Single ended is not an option.
The actual termination of the balanced cabling to the cartridge is crucial and the manual will explain this in detail.
We found that XLR connectors (unfortunately, the high end standard) were simply not good enough for the low-level signal connections, so instead the Orestes employs the famous LEMO connectors from Switzerland. Any adaptor

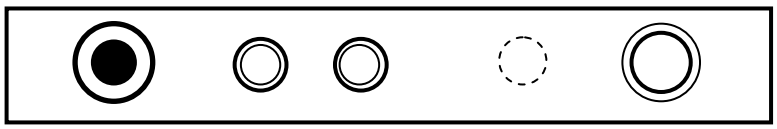
connector from the balanced LEMO connector to RCA standard will ruin the performance of the Orestes.
All tonearms with 5 pin connections or even RCA standard output (with correct separation between positive/negative and shield) can be used (or moditied to be used).

The Orestes will accept MM or MC cartridges (both balanced). Impedance load on MC is selectable from 10 Ohm to 47 kOhm or the user's own precise preference anywhere between these two values.
Impedance loading is selected by a high quality, Swiss-made ELMA attenuator that can be bypassed once the owner has found his preferred loading.

In keeping with usual Gryphon standards, there is no internal cabling, the fully sealed PCB is of highest military standards, only the best components are used, there is no negative feedback, the Orestes is DC coupled, absolutely dual mono and comes with two separate power supplies featuring our famous C-core custom-made transformers. The separate Orestes power supplies are mounted inside the Elektra power supply.

The Orestes will prove to be the ultimate tool for appreciation and evaluation of vinyl recordings. Using the best records and their master tapes for comparison during the development of the Orestes, we and our listening panel have found it to be spookily accurate and revealing. You will find no electronically manipulated or tailored romance here, only the romance (if any) intended by the recording engineer. You will hear exactly what is there on the record, no less and no more, and certainly no euphonic colorations, regardless of how seductive some listeners might find them. Utter neutrality is what we have achieved with the Orestes and we are confident that the true vinyl enthusiast is mature enough to appreciate this accomplishment.

CONNECTIONS



Impedance MC in MM in 24 V DC

TURN PRE- AND POWER AMPLIFIER OFF BEFORE YOU PROCEED !

POWERSUPPLY

Connect the Orestes phono section with the extra set of power supply cables (identical to the other set of Elektra power supply cables.

MC OR MM ?

The Orestes is factory set for Moving Coil cartridges, but can be interchanged to MM by relocating 3 straps on the circuit board.
The straps (red) are located in the center of the Orestes circuit board (J1 / J107 / J108). The correct positions are marked on the circuit board.

IMPEDANCE SELECTOR

The impedance selector is a custom made Swiss attenuator with gold plated wipers to secure lasting superior contact.
The selector has 6 positions. The positions is displayed in the small window just above the dial.

IMPEDANCE SELECTOR MM INPUT

Position 1	10 Ohm
Position 2	40 Ohm
Position 3	80 Ohm
Position 4	100 Ohm
Position 5	800 Ohm
Position 6	47 kOhm

CUSTOM LOADS

Besides these values it is possible to load the cartridge with any impedance between 10 Ohm and 47 kOhm, by inserting resistors in the sockets found on the circuit board just left of the impedance attenuator (seen from the rear) RIN1 / RIN2.

BYPASSING THE SELECTOR

Loading the sockets will bypass the selector.
The selector must be set and remain in position 6.

IMPORTANT:
DO NOT CHANGE IMPEDANCE WHEN PREAMP IS IN PHONO PLAYBACK

The formula to find the correct value is as follows:

Desired load impedance: Rload

$$\frac{\text{Rload} \times 23500}{47000 - \text{Rload}}$$

The result of this calculation equals the value of each of the resistors that is to be inserted in the sockets (1 pair per side) We recommend the use of 1% low inductance metal-film resistors nut any resistor of preference can be used.

IMPEDANCE MM

When the straps on the board are in the MM position the impedance is always 47 kOhm.

BALANCED CABLES

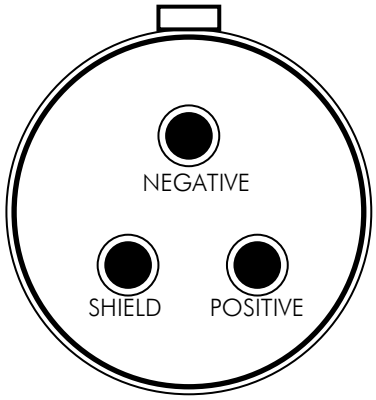
The Orestes is only made for Balanced operation and failure to make correct termination will diminish performance and may damage the unit.

For absolutely superior performance, the Swiss made Lemo connector was chosen. 1 pair is supplied with the Orestes module.

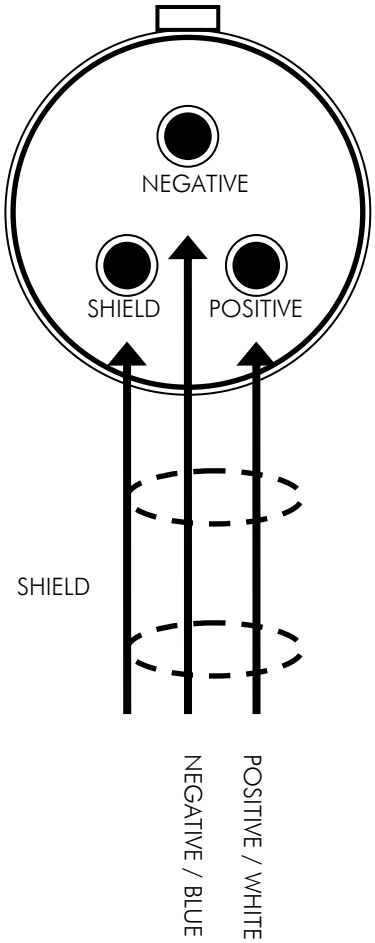
PIN CONFIGURATION ON LEMO CONNECTOR

CABLE CONNECTOR AS SEEN FROM SOLDERING SIDE

(IDENTICAL TO OUTSIDE VIEW OF INPUT SOCKET)



WIRING SCHEMATIC
EXAMPLE:
LEFT CHANNEL



VERY IMPORTANT:
THE SHIELD OF THE CABLE MUST BE INSULATED FROM THE OUTER PART OF THE LEMO CONNECTOR.

SHIELD MUST ONLY BE CONNECTED TO THE SOLDERING POINT OF THE CONNECTOR.

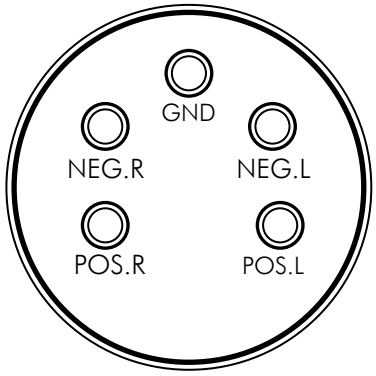
CARTRIDGE

STANDARD CARTRIDGE PIN CONNECTION:

WHITE: POSITIVE LEFT
BLUE: NEGATIVE LEFT

RED: POSITIVE RIGHT
GREEN: NEGATIVE RIGHT

DO NOT CONNECT THE SHIELD AT CARTRIDGE END OR CONNECT NEGATIVE (MINUS) WITH SHIELD AT ANY POINT.



TONEARM CONNECTOR AS SEEN FROM SOLDERING SIDE. (TIFFANY BRAND)

TONEARM GROUNDING

The Ground wire from the tonearm can be connected to the grounding post on the Elektra Preamplifier.
Most Audiophiles have learned that there are no clean cut rules when it cones to efficient grounding of tonearms.
It pays to experiment and sometimes no grounding will do the trick or the solution may turn out to very unusual.
Experiment.

Unless you are a wizard with a soldering iron, we recommend that you ask your Gryphon dealer to make a dedicated Orestes phono cable.

Orestes phono cables based on our solid silver Guideline cables can be factory made to your specifications.

ORESTES TECHNICAL SPECIFICATIONS

Signal to Noise ratio:	MM 78 dB unweighted ref. 10mV
	MM 84 dB A weighted ref. 10mV
	MC 84 dB unweighted ref. 0,5mV
	MC 88 dB A weighted ref. 0,5mV

Gain MC: 62 dB
Gain MM: 32 dB

RIAA tracking: +/- 0,1 dB 20 - 20 kHz

THD: 0,01 %

Output impedance: 50 Ohm

Input overload margin:	MC 50mVpp
	MM 850mVpp
RIAA out voltage sving:	30 Vpp

TWEAK ALERT

In the best Gryphon tradition we have spent a huge amount of time with our prototypes before we release a new product. We are obsessed with what we do and consider ourselves to be open minded and are fascinated by the "grey area" between logical, technical facts and things we just hear that make no obvious technical sense. If we find that a "grey trick" makes musical sense, we will implement it as long as it does not sacrifice safety or reliability.

In the Elektra design a number of tweaks can be found and the result is a fine balance that can easily be disturbed.

We strongly advise against any alteration of the original design, it will void the warranty and most certainly not provide more than a difference instead of a real improvement of musical realism.

We are fully aware of the fun of playing with AC conditioners, bricks, platforms, cables and so on. We appreciate much of it, but please listen to our intentions before you go ahead and if you do, do yourself (and us) the favor of now and then go back and listen to the "naked" design as it was intended.

Enjoy,..

WARRANTY

The Gryphon Elektra is warranted against failures arising through faulty workmanship and materials for a period of 5 year from date of purchase. The warranty is not transferable. All claims under this warranty must he made to the distributor in the buyers country by returning the unit securely packed in the original box with all accessories, postage/freight prepaid and insured. The unit will be repaired or replaced at no charge for parts and labor.

This warranty remains valid only if the serial number of the unit has not been defaced or removed and if repairs are performed only by authorized Gryphon dealers or distributors. It does not cover damage due to misuse, accident or neglect. The distributor or manufacturer. Gryphon Audio Designs, Denmark, retains the exclusive right to make such judgement on the basis of inspection.

The retailer, distributor or manufacturer of the Gryphon shall not be liable for consequential damage arising from the use, misuse or failure of this product, including injuries to persons or property.

To qualify, the warranty registration card must he filled out and returned to the manufacturer within 10 days of purchase.

REGISTRATION CARD

The warranty of your Gryphon Elektra is effective only if you fill out the enclosed registration card and return it to us or to your national Gryphon distributor. Your comments are highly appreciated. When we receive the card from you, we will send you a small token gift and keep you informed of future product development. Thank you.

If you attend Hi Fi Shows, please look us up. We always welcome the opportunity to meet people who live with our products and share our love of music.

NOTES

ELEKTRA Serial No. _____

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